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EXAMINER

PRENDERGAST, ROBERTA D

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2628

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07/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/805,991

Applicant(s)

SAKAMOTO ET AL.

Examiner

Roberta Prendergast

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15,16,20,35,36,40,45,52,70 and 72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20,40,70 and 72 is/are allowed.
- 6) ☒ Claim(s) 15,16,35,36,45 and 52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/5/2007 has been entered.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 15-16, 35-36 and 52 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 65 of copending Application No. 10/958,301 in view of Jones U.S. Patent No. 6952645.

Referring to claims 15 and 52, copending Application No. 10/958,301 teaches a map display method and device for converting externally provided communications information into an applicable object model for arrangement on a map image, said map display device comprising: an input part for receiving an instruction from a user; a map data storage part for storing map data (Claim 65, lines 1-5); an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of

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the communications information on the map image (Claim 65, lines 6-7, i.e. it is understood that a 3D polygon model representing traffic information has a shape allowing the user to understand content of the communications information); a communications part for receiving the communications information, the communications information including information which varies in real time (Claim 65, lines 8-9 and 16-17); a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part and arranging the at least one object model at a position on the map image based on the communications information (Claim 65, lines 10-13 and 18-21); and a display part for displaying a result map image including the map image and the at least one object model obtained by said map data arranging part (Claim 65, lines 14-15) but does not specifically teach a time information storage part for storing time information corresponding to a position of a mobile unit which moves according to a schedule on a predetermined route, wherein said map data arranging part refers to the time information to create the at least one object model to correspond to the mobile unit for arrangement on the map image.

Jones teaches an input part for receiving an instruction from a user (Figs. 2 (element 34a) and 3(element 34b); column 2, lines 64-67; column 5, lines 14-28, i.e. a user inputs an instruction via the input device specifying a request for information, with regards to a mobile unit, and including the user's preferences on how and when the user wishes to receive the information as well as the type of information); a communications part for receiving the communications information, the communications

information including information which varies in real time (column 6, lines 1-20; column 7, lines 1-26; column 8, lines 53-67; column 9, lines 6-16; column 10, lines 32-50; column 14, lines 44-49, i.e. a communications part transmits the user's request/instruction and receives the information requested from the base station manager in real-time, for example, each time the information is updated); a display part for displaying a result map image including the map image and the at least one object model obtained by said map data arranging part (Figs. 2 (element 35a) and 3(element 35b); column 14, lines 18-67, i.e. mapping data is received at the user's computer and a graphical display depicting a map that show's the mobile units location relative to the destination is displayed); and a time information storage part for storing time information corresponding to a position of a mobile unit which moves according to a schedule on a predetermined route, wherein said map data arranging part refers to the time information to create the at least one object model to correspond to the mobile unit for arrangement on the map image (column 5, lines 29-43; column 7, lines 38-58; column 8, lines 16-47; columns 12-13, lines 64-14; column 13, lines 15-41; column 14, lines 18-67; column 15, lines 48-63; columns 17-18, lines 27-20, i.e. a time information storage part/database stores time information regarding a predetermined route for a mobile unit is stored and information regarding the current location of the mobile unit is transmitted to the user and a graphical display depicting a map showing the location of the mobile unit based on the time information is displayed on the user's computer).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the map display device of copending

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Application No. 10/958301 to include the teachings of Jones thereby providing an automated system and method for monitoring and reporting the status of a mobile unit in response to requests from users at remote locations such that a particular vehicle associated with the system can be monitored, and a user can be notified when an arrival of the vehicle at a predefined location is imminent so that a user can prepare for the arrival of the vehicle knowing the precise time of arrival (Jones: column 3, lines 16-30).

Referring to claim 16, the rationale for claim 15 is incorporated herein, copending Application No. 10/958,301 teaches the map display device according to claim 15 but does not specifically teach wherein said map data arranging part refers to the time information to select only the at least one object model corresponding to the mobile unit to be displayed on the map image, and calculates a position of the at least one object model on the map image for data arrangement.

Jones teaches wherein said map data arranging part refers to the time information to select only the at least one object model corresponding to the mobile unit to be displayed on the map image, and calculates a position of the at least one object model on the map image for data arrangement (Fig. 5(element 86); column 14, lines 18-55; column 15, lines 52-63; column 20, lines 14-39, i.e. the message manager obtains time information corresponding to a position of a particular mobile unit on a predetermined route from the time information storage part and appropriate map data from the mapping system and transmits the information and data to the user's remote computer where a graphical display depicting a map showing the location of the mobile

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unit based on the time information is displayed on the user's computer indicating that a map data arranging part has referred to the time information to select the mobile unit model and to calculate the position of the model on the map image). The motivation statement for claim 15 is incorporated herein.

This is a provisional obviousness-type double patenting rejection.

Claims 35-36 and 45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 65 of copending Application No. 10/958,301 in view of Jones U.S. Patent No. 6952645 and Schmier et al. U.S. Patent No. 6006159. Referring to claim 35, the rationale for claim 15 is incorporated herein, Okude et al., as modified above, teaches a navigation device including an input part for receiving an instruction from a user; a map data storage part for storing map data (Claim 65, lines 1-5); an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image (Claim 65, lines 6-7, i.e. it is understood that a 3D polygon model representing traffic information has a shape allowing the user to understand content of the communications information); a communications part for receiving the communications information, the communications information including information which varies in real time (Claim 65, lines 8-9 and 16-17); a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said

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object model display information storage part and arranging the at least one object model at a position on the map image based on the communications information (Claim 65, lines 10-13 and 18-21); and a display part for displaying a result map image including the map image and the at least one object model obtained by said map data arranging part (Claim 65, lines 14-15) but does not specifically teach a position detection part for detecting a current position; a route selection part for selecting a route to the destination based on the instruction provided by said input part, the current position detected by said position detection part, and the map data stored in said map data storage part; a guiding part for providing the guidance to the destination in response to the communications information received by said communications part, the route selected by said route selection part, the current position detected by said position detection part, and the map data provided by said map data storage part, and outputting a resultant map image including the map image and the at least one object model obtained by said map data arranging part; a display part for displaying the resultant map image outputted from said guiding part; and a time information storage part for storing time information corresponding to a position of a mobile unit which moves according to a schedule on a predetermined route, wherein said map data arranging part refers to the time information to create the at least one object model to correspond to the mobile unit for arrangement on the map image.

Jones teaches a position detection part for detecting a current position (Figs. 1(elements 18 and 23) and 2(element 18); column 4, lines 3-31; column 14, lines 44-55; column 17, lines 9-26 and 51-59, i.e. it is understood that a GPS device that obtains the

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current position of the user and/or the mobile vehicle is a position detecting part as claimed); a route selection part for selecting a route to the destination based on the instruction provided by said input part, the current position detected by said position detection part, and the map data stored in said map data storage part (Abstract; column 11, lines 29-59; column 14, lines 44-67, i.e. the user inputs a current position/stop location and the desired route/bus/vehicle and the mapping system provides a map having the current location of the vehicle and an estimated time of arrival thus indicating a route selection part); and a time information storage part for storing time information corresponding to a position of a mobile unit which moves according to a schedule on a predetermined route, wherein said map data arranging part refers to the time information to create the at least one object model to correspond to the mobile unit for arrangement on the map image (column 5, lines 29-43; column 7, lines 38-58; column 8, lines 16-47; columns 12-13, lines 64-14; column 13, lines 15-41; column 14, lines 18-67; column 15, lines 48-63; columns 17-18, lines 27-20, i.e. a time information storage part/database stores time information regarding a predetermined route for a mobile unit is stored and information regarding the current location of the mobile unit is transmitted to the user and a graphical display depicting a map showing the location of the mobile unit based on the time information is displayed on the user's computer)..

Schmier et al. teaches a position detection part for detecting a current position (Abstract; Figs. 1(element 14) and 6(element 14); column 3, lines 35-44 and 50-64; column 6-7, lines 66-7; column 9, lines 3-18, i.e. GPS units are used to detect the current positions of each vehicle in a transit system); a route selection part for selecting

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a route to the destination based on the instruction provided by said input part, the current position detected by said position detection part, and the map data stored in said map data storage part (Abstract; column 2, lines 11-48; column 4, lines 17-41; column 5, lines 11-25; column 6, lines 54-65; column 7, lines 2-30; column 9, lines 19-25; column 11, lines 35-44 and 55-65; columns 11-12, lines 65-9; columns 13-14, lines 60-27, i.e. one or more routes to a destination are provided such that a user may select the route having either the shortest time to the destination or available seating depending on the user's preference); a guiding part for providing the guidance to the destination in response to the communications information received by said communications part, the route selected by said route selection part, the current position detected by said position detection part, and the map data provided by said map data storage part, and outputting a resultant map image including the map image and the at least one object model obtained by said map data arranging part (Abstract; column 2, lines 11-48; column 4, lines 17-41; column 5, lines 11-25; column 6, lines 54-65; column 7, lines 2-30; column 9, lines 19-25; column 11, lines 35-44 and 55-65; columns 11-12, lines 65-9; columns 13-14, lines 60-27, i.e. the user is provided guidance data including the most efficient route based on time to destination or seat availability as well as departure times of all buses along a particular route or return trip times in order to allow the user the opportunity to determine/judge the time available to run errands); a display part for displaying the resultant map image outputted from said guiding part (column 6, lines 4-45; column 14, lines 18-50, i.e. displays are provided at stops and on vehicles as well as through a user's portable device thus providing to the

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user multiple display choices based on user preferences); and a time information storage part for storing time information corresponding to a position of a mobile unit which moves according to a schedule on a predetermined route (column 4, lines 17-60, i.e. a transit data table stores time data corresponding to a position of a mobile unit along a predetermined route that is updated to provide accurate information regarding arrival and departure times as well as seating availability).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the map display device of copending Application No. 10/958,301 to include the teachings of Jones et al. and Schmier et al. thereby providing an automated system and method for monitoring and reporting the status of a mobile unit in response to requests from users at remote locations such that a particular vehicle associated with the system can be monitored, and a user can be notified when an arrival of the vehicle at a predefined location is imminent so that a user can prepare for the arrival of the vehicle knowing the precise time of arrival (Jones: column 3, lines 16-30) and further providing a public transit vehicle arrival system that provides status information for all vehicles in the system and other information including news and advertisements for public access in a manner geared to the locations of the vehicles, the time of day, day of the week, date, location, season, holiday, weather etc. through portable access means such as notebook and palm computers, and stationary access means such as personal computers and displays located at station/bus stops and on the vehicles themselves (Schmier et al.: Abstract).

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Referring to claim 36, claim 36 recites the elements of claims 16 and 35 and therefore the rationale for the rejection of claims 16 and 35 is incorporated herein.

Referring to claim 45, the rationale for claim 35 is incorporated herein, copending Application No. 10/958,301, as modified above, teaches having all of the elements of the navigation device, as recited in claim 35 and found in claim 45, but does not specifically teach the elements recited in claim 45, that are not claimed in claim 35, wherein said communications part receives the communications information including position information about any available vehicles moving according to a schedule on predetermined routes, and when the user desires to take one of the available vehicles, transmits selected vehicle information including information for specifying which of the available vehicles the user desires to take, said guiding part generates the selected vehicle information when the user desires to take one of the available vehicles, and said guiding part compares, at least, the predetermined routes on which the available vehicles move with the route to the destination selected by said route selection part, and determines whether the available vehicles are appropriate.

Schmier et al. teaches this limitation (Abstract; column 2, lines 11-48; column 4, lines 17-41; column 5, lines 11-25; column 6, lines 54-65; column 7, lines 2-30; column 9, lines 19-25; column 11, lines 35-44 and 55-65; columns 11-12, lines 65-9; columns 13-14, lines 60-27, i.e. one or more routes to a destination are provided such that a user may select the route desired and the guidance part determines the most efficient route based on the shortest time to the destination or available seating depending on the

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user's preference). The motivation statement for claim 35 is incorporated herein. The motivation statement for claim 35 is incorporated herein.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-16, 35-36 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okude et al. U.S. Patent No. 6175802 in view of Jones U.S. Patent No. 6952645.

Referring to claims 15 and 52, Okude et al. teaches a map display method and device for converting externally provided communications information into an applicable object model for arrangement on a map image, said map display device comprising: an input part for receiving an instruction from a user (Fig. 1 (elements 1-4 & 1-5); column 4, lines 62-67); a map data storage part for storing map data (Fig. 1 (element 1-3); column 4, lines 53-61); an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image (Fig. 5 (elements 3-7, data read unit) & 19 (elements 19-1 & 19-2); column 7, lines 26-37); a communications part for receiving the communications information, the

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communications information including information which varies in real time (Fig. 1 (elements 1-7 thru 1-11) & 5 (element 3-5), i.e. the current location detection unit indicates information which varies in real time; column 5, lines 1-15); a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part and arranging the at least one object model at a position on the map image based on the communications information (Figs. 1 (element 1-1), 3, 5 & 19; columns 5-6, lines 50-19; columns 6-7, lines 55-8, i.e. the operation and processing unit is understood to be the map data arranging unit); and a display part for displaying a result map image including the map image and the at least one object model obtained by said map data arranging part (Figs. 1 (element 1-2) & 24 (element 24-5); column 4, lines 45-53) but does not specifically teach a time information storage part for storing time information corresponding to a position of a mobile unit which moves according to a schedule on a predetermined route, wherein said map data arranging part refers to the time information to create the at least one object model to correspond to the mobile unit for arrangement on the map image.

Jones teaches an input part for receiving an instruction from a user (Figs. 2 (element 34a) and 3(element 34b); column 2, lines 64-67; column 5, lines 14-28, i.e. a user inputs an instruction via the input device specifying a request for information, with regards to a mobile unit, and including the user's preferences on how and when the user wishes to receive the information as well as the type of information); a communications part for receiving the communications information, the communications

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information including information which varies in real time (column 6, lines 1-20; column 7, lines 1-26; column 8, lines 53-67; column 9, lines 6-16; column 10, lines 32-50; column 14, lines 44-49, i.e. a communications part transmits the user's request/instruction and receives the information requested from the base station manager in real-time, for example, each time the information is updated); a display part for displaying a result map image including the map image and the at least one object model obtained by said map data arranging part (Figs. 2 (element 35a) and 3(element 35b); column 14, lines 18-67, i.e. mapping data is received at the user's computer and a graphical display depicting a map that show's the mobile units location relative to the destination is displayed); and a time information storage part for storing time information corresponding to a position of a mobile unit which moves according to a schedule on a predetermined route, wherein said map data arranging part refers to the time information to create the at least one object model to correspond to the mobile unit for arrangement on the map image (column 5, lines 29-43; column 7, lines 38-58; column 8, lines 16-47; columns 12-13, lines 64-14; column 13, lines 15-41; column 14, lines 18-67; column 15, lines 48-63; columns 17-18, lines 27-20, i.e. a time information storage part/database stores time information regarding a predetermined route for a mobile unit is stored and information regarding the current location of the mobile unit is transmitted to the user and a graphical display depicting a map showing the location of the mobile unit based on the time information is displayed on the user's computer).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the map display device of Okude et al. to

include the teachings of Jones thereby providing an automated system and method for monitoring and reporting the status of a mobile unit in response to requests from users at remote locations such that a particular vehicle associated with the system can be monitored, and a user can be notified when an arrival of the vehicle at a predefined location is imminent so that a user can prepare for the arrival of the vehicle knowing the precise time of arrival (Jones: column 3, lines 16-30).

Referring to claim 16, the rationale for claim 15 is incorporated herein, Okude et al. teaches the map display device according to claim 15 but does not specifically teach wherein said map data arranging part refers to the time information to select only the at least one object model corresponding to the mobile unit to be displayed on the map image, and calculates a position of the at least one object model on the map image for data arrangement.

Jones teaches wherein said map data arranging part refers to the time information to select only the at least one object model corresponding to the mobile unit to be displayed on the map image, and calculates a position of the at least one object model on the map image for data arrangement (Fig. 5(element 86); column 14, lines 18-55; column 15, lines 52-63; column 20, lines 14-39, i.e. the message manager obtains time information corresponding to a position of a particular mobile unit on a predetermined route from the time information storage part and appropriate map data from the mapping system and transmits the information and data to the user's remote computer where a graphical display depicting a map showing the location of the mobile unit based on the time information is displayed on the user's computer indicating that a

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map data arranging part has referred to the time information to select the mobile unit model and to calculate the position of the model on the map image). The motivation statement for claim 15 is incorporated herein.

Claims 35-36 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okude et al. in view of Jones as applied to claims 15-16 and 52 above, and further in view of Schmier et al. U.S. Patent No. 6006159.

Referring to claim 35, the rationale for claim 15 is incorporated herein, Okude et al., as modified above, teaches a navigation device including an input part; a map data storage part; an object model display part; a communications part; a map data arranging part; a display part and a time information storage part as claimed in claim 15 above but does not specifically teach a position detection part for detecting a current position; a route selection part for selecting a route to the destination based on the instruction provided by said input part, the current position detected by said position detection part, and the map data stored in said map data storage part; a guiding part for providing the guidance to the destination in response to the communications information received by said communications part, the route selected by said route selection part, the current position detected by said position detection part, and the map data provided by said map data storage part, and outputting a resultant map image including the map image and the at least one object model obtained by said map data arranging part; and a display part for displaying the resultant map image outputted from said guiding part.

Jones teaches a position detection part for detecting a current position (Figs. 1(elements 18 and 23) and 2(element 18); column 4, lines 3-31; column 14, lines 44-55; column 17, lines 9-26 and 51-59, i.e. it is understood that a GPS device that obtains the current position of the user and/or the mobile vehicle is a position detecting part as claimed); a route selection part for selecting a route to the destination based on the instruction provided by said input part, the current position detected by said position detection part, and the map data stored in said map data storage part (Abstract; column 11, lines 29-59; column 14, lines 44-67, i.e. the user inputs a current position/stop location and the desired route/bus/vehicle and the mapping system provides a map having the current location of the vehicle and an estimated time of arrival thus indicating a route selection part).

Schmier et al. teaches a position detection part for detecting a current position (Abstract; Figs. 1(element 14) and 6(element 14); column 3, lines 35-44 and 50-64; column 6-7, lines 66-7; column 9, lines 3-18, i.e. GPS units are used to detect the current positions of each vehicle in a transit system); a route selection part for selecting a route to the destination based on the instruction provided by said input part, the current position detected by said position detection part, and the map data stored in said map data storage part (Abstract; column 2, lines 11-48; column 4, lines 17-41; column 5, lines 11-25; column 6, lines 54-65; column 7, lines 2-30; column 9, lines 19-25; column 11, lines 35-44 and 55-65; columns 11-12, lines 65-9; columns 13-14, lines 60-27, i.e. one or more routes to a destination are provided such that a user may select the route having either the shortest time to the destination or available seating

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depending on the user's preference); a guiding part for providing the guidance to the destination in response to the communications information received by said communications part, the route selected by said route selection part, the current position detected by said position detection part, and the map data provided by said map data storage part, and outputting a resultant map image including the map image and the at least one object model obtained by said map data arranging part (Abstract; column 2, lines 11-48; column 4, lines 17-41; column 5, lines 11-25; column 6, lines 54-65; column 7, lines 2-30; column 9, lines 19-25; column 11, lines 35-44 and 55-65; columns 11-12, lines 65-9; columns 13-14, lines 60-27, i.e. the user is provided guidance data including the most efficient route based on time to destination or seat availability as well as departure times of all buses along a particular route or return trip times in order to allow the user the opportunity to determine/judge the time available to run errands); a display part for displaying the resultant map image outputted from said guiding part (column 6, lines 4-45; column 14, lines 18-50, i.e. displays are provided at stops and on vehicles as well as through a user's portable device thus providing to the user multiple display choices based on user preferences); and a time information storage part for storing time information corresponding to a position of a mobile unit which moves according to a schedule on a predetermined route (column 4, lines 17-60, i.e. a transit data table stores time data corresponding to a position of a mobile unit along a predetermined route that is updated to provide accurate information regarding arrival and departure times as well as seating availability).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the map display device of Okude et al. to include the teachings of Jones thereby providing an automated system and method for monitoring and reporting the status of a mobile unit in response to requests from users at remote locations such that a particular vehicle associated with the system can be monitored, and a user can be notified when an arrival of the vehicle at a predefined location is imminent so that a user can prepare for the arrival of the vehicle knowing the precise time of arrival (Jones: column 3, lines 16-30) and further providing a public transit vehicle arrival system that provides status information for all vehicles in the system and other information including news and advertisements for public access in a manner geared to the locations of the vehicles, the time of day, day of the week, date, location, season, holiday, weather etc. through portable access means such as notebook and palm computers, and stationary access means such as personal computers and displays located at station/bus stops and on the vehicles themselves (Schmier et al.: Abstract).

Referring to claim 36, claim 36 recites the elements of claims 16 and 35 and therefore the rationale for the rejection of claims 16 and 35 is incorporated herein.

Referring to claim 45, the rationale for claim 35 is incorporated herein, Okude et al., as modified above teaches the navigation device of claim 35 but does not specifically teach wherein said communications part receives the communications information including position information about any available vehicles moving according to a schedule on predetermined routes, and when the user desires to take

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one of the available vehicles, transmits selected vehicle information including information for specifying which of the available vehicles the user desires to take, said guiding part generates the selected vehicle information when the user desires to take one of the available vehicles, and said guiding part compares, at least, the predetermined routes on which the available vehicles move with the route to the destination selected by said route selection part, and determines whether the available vehicles are appropriate.

Schmier et al. teaches this limitation (Abstract; column 2, lines 11-48; column 4, lines 17-41; column 5, lines 11-25; column 6, lines 54-65; column 7, lines 2-30; column 9, lines 19-25; column 11, lines 35-44 and 55-65; columns 11-12, lines 65-9; columns 13-14, lines 60-27, i.e. one or more routes to a destination are provided such that a user may select the route desired and the guidance part determines the most efficient route based on the shortest time to the destination or available seating depending on the user's preference). The motivation statement for claim 35 is incorporated herein.

Allowable Subject Matter

Claims 20, 40, 70 and 72 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claim 20, cited prior art does not teach a map display device comprising a communications part for receiving the communications information, the communications information including information which varies in real time and information specifying at least one faregate to be passed through, and transmitting

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charge information for processing if a predetermined condition is satisfied; a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part, arranging the at least one object model at a position on the map image based on the communications information, and generating the charge information if the predetermined condition is satisfied; a ticket information storage part for storing ticket information corresponding to a ticket used for paying a fare for a predetermined chargeable section, wherein said map data arranging part generates the ticket information stored in said ticket information storage part when the ticket is purchased, the ticket information includes information about an expiration date of the ticket, and said map data arranging part refers to the information about the expiration date of the ticket, and if the expiration date is approaching, creates a message for display on said display part.

Regarding claim 40, cited prior art does not teach a navigation device for providing guidance to a destination comprising a communications part for receiving the communications information, the communications information including information which varies in real time and information specifying at least one faregate to be passed through, and transmitting charge information for charge processing if a predetermined condition is satisfied; a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part, arranging the at least one object model at a position on the map image based on the

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communications information, and generating the charge information if the predetermined condition is satisfied; a guiding part; a ticket information storage part for storing ticket information corresponding to a ticket used for paying a fare for a predetermined chargeable section, wherein said guiding part generates the ticket information stored in said ticket information storage part when the ticket is purchased, the ticket information includes information about an expiration date of the ticket, and said map data arranging part refers to the information about the expiration date of the ticket, and if the expiration date is approaching, creates a message for display on said display part.

Regarding claim 70, cited prior art does not teach a map display device comprising: a communications part for receiving the communications information, the communications information including information which varies in real time and information specifying at least one faregate to be passed through, and transmitting charge information for charge processing if a predetermined condition is satisfied; a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part, arranging the at least one object model at a position on the map image based on the communications information, and generating the charge information if the predetermined condition is satisfied; a ticket information storage part for storing ticket information corresponding to a ticket used for paying a fare for a predetermined chargeable section, wherein said map data arranging part generates the ticket information stored in said ticket information storage part when the

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ticket is purchased, and said map data arranging part changes the communications information based on the ticket information.

Regarding claim 72, cited prior art does not teach a navigation device for providing guidance to a destination comprising a communications part for receiving the communications information, the communications information including information which varies in real time and information specifying at least one faregate to be passed through, and transmitting charge information for charge processing if a predetermined condition is satisfied; a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part, arranging the at least one object model at a position on the map image based on the communications information, and generating the charge information if the predetermined condition is satisfied; a guiding part; a ticket information storage part for storing ticket information corresponding to a ticket used for paying a fare for a predetermined chargeable section, wherein said guiding part generates the ticket information stored in said ticket information storage part when the ticket is purchased, and said guiding part changes the communications information based on the ticket information.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following U.S. Patents are cited to further show the state of the art with respect to vehicle navigation systems displaying the position of a mobile unit, which moves according to a schedule on a predetermined route.

Burgener U.S. Patent No. 5736940

Westerlage et al. U.S. Patent No. 5987377

Lamb U.S. Patent No. 6184802

Schmier et al. U.S. Patent No. 6374176

Sakamoto et al. U.S. Patent No. 6411293

Sakamoto et al. U.S. Patent No. 6418374

Jones U.S. Patent No. 6748318

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta Prendergast whose telephone number is (571) 272-7647. The examiner can normally be reached on M-F 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571) 272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RP 6/23/2007



Ulka Chauhan
Supervisory Patent Examiner